EFFECTIVE DATE

June 2, 1997

LANL-YMP-QP-02.11, R6

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PERSONNEL ORIENTATION

LOS ALAMOS QUALITY PROGRAM



APPROVAL FOR RELEASE	
K. A. WEST - PREPARER Signature on file	DATE Date on file
M. J. CLEVENGER - QUALITY ASSURANCE PROJECT LEADER Signature on file	DATE Date on file
G. Y. BUSSOD - LABORATORY LEAD Signature on file	DATE Date on file

Los Alamos

Yucca Mountain Site Characterization Project

HISTORY OF REVISIONS

REVISION NO.	EFFECTIVE DATE	PAGES REVISED	REASON FOR CHANGE
R0	06/15/92	N/A	Supersedes TWS-QAS-QP-02.6.
R1	08/20/92	4	Section 6.2 changed to require YMP Orientation within 6 months of hire.
R2	01/31/94	All	Revised to meet QARD requirements.
R3	06/15/94	3-5, Att. 1	To better define QARD requirements and address RTN review comments.
R4	07/31/95	Att. 1	Attachment 1 modified (editorial changes) to reflect the new duties of DOE - YMPQA.
R5	06/03/96	All	Deleted the requirement for a YMP Orientation Lesson Plan.
R6	06/02/97	3,5-6, & Atts. 1 & 2	To address the new Technical Assurance staff responsibilities.

Los Alamos

Yucca Mountain Site Characterization Project

PERSONNEL ORIENTATION

1.0 PURPOSE

This procedure describes the process for conducting employee orientation for the Los Alamos National Laboratory's (Los Alamos) Yucca Mountain Site Characterization Project (YMP or Project).

2.0 SCOPE

- 2.1 This procedure governs employee orientation for the Los Alamos YMP.
- 2.2 This procedure applies to all Los Alamos and Los Alamos subcontractor personnel (hereafter referred to as YMP personnel) working under the Los Alamos YMP quality assurance program.

3.0 REFERENCES

DOE/RW-0333P, Office of Civilian Radioactive Waste Management Quality Assurance Requirements and Description (QARD)

LANL-YMP-QP-02.5, Selection of Personnel

LANL-YMP-QP-17.6, Records Management

Los Alamos Environmental, Safety, and Health Plan

Los Alamos Yucca Mountain Project Environmental, Safety, and Health Plan

4.0 DEFINITIONS

4.1 Job and Quality Assurance Orientation

Orientation is an overview given to YMP personnel to provide a basic understanding of the Los Alamos YMP, organizational structure, quality assurance program, and employee duties, responsibilities, and authority.

4.2 Privileged Record

A record to which access is controlled due to statutory, legal, or security requirements.

5.0 RESPONSIBILITIES

The following personnel are responsible for activities identified in Section 6.0 of this procedure:

- Technical Assurance (TA) Liaison (any member of the TA organization)
- Supervisors
- Training Coordinator
- Training Specialist

6.0 PROCEDURE

The use of this procedure must be controlled as follows:

- If this procedure cannot be implemented as written, YMP personnel should notify appropriate supervision. If it is determined that a portion of the work cannot be accomplished as described in this QP, or would result in an undesirable situation, that portion of the work will be stopped and not resumed until this procedure is modified or replaced by a new document that reflects the current work practice.
- YMP personnel may use copies of this procedure printed from the controlled document electronic file; however, YMP personnel are responsible for assuring that the correct revision of this procedure is used.
- When this procedure becomes obsolete or superseded, it must be destroyed or marked "superseded" to ensure that this document is not used to perform work.

NOTE: The term "training representative" is used to refer to the Training Coordinator or a Training Specialist.

6.1 Orientation is provided to YMP personnel

- Prior to YMP personnel performing work subject to YMP quality assurance program requirements
- Each time a Position Description or a Limited Function Description, as described in QP-02.5, is assigned
- Each time additional responsibilities are added to a Position Description or a Limited Function Description

To accomplish this orientation, the **supervisor** performs the following:

- 6.1.1 Ensures the employee's name and YMP position title are entered in Section I of Attachment 1
- 6.1.2 Reviews the employee's Position Description or Limited-Function Description and explains to the employee their YMP position title, duties, responsibilities, and authority.
- 6.1.3 Reviews the Los Alamos YMP organizational chart and explains to the employee their position on the chart, reporting relationships, and supervisory responsibilities, if applicable.
- 6.1.4 Provides to the employee an overview of the Los Alamos YMP, using Section I of Attachment 2 as a guide.
- 6.1.5 Documents the orientation by completing Section II of Attachment 1

- 6.1.6 If the orientation was provided to the employee because additional responsibilities were added to the employee's Position Description or Limited Function Description, the **supervisor** performs the following:
 - 6.1.6.1 Enters NA in the box in Section III of Attachment 1
 - 6.1.6.2 Places the completed attachment in a double envelope marked "Privileged," "Privileged Records," or similar statement according to QP-17.6, and forwards it to a training representative.

OR

- 6.1.7 If the orientation was provided to allow the employee to perform work subject to the requirements of the YMP quality program, or because of assignment to a new position described on a Position Description or Limited Function Description, the **supervisor** performs the following:
 - 6.1.7.1 Contacts a technical assurance liaison and requests that a quality assurance orientation be provided for the employee
 - 6.1.7.2 Places the partially completed attachment in a double envelope marked "Privileged," "Privileged Records," or a similar statement and forwards it to a technical assurance liaison.

6.2 Quality Assurance Orientation

A **technical assurance liaison** reviews the employee's duties and responsibilities described on the Position Description or Limited-Function Description to better understand the employee's job function and performs the following:

- 6.2.1 Conducts a quality assurance orientation using Section II of Attachment 2 as a guide.
- 6.2.2 Documents the orientation by completing Section III of Attachment 1.
- 6.2.3 Places the completed attachment in a double envelope marked "Privileged," "Privileged Records," or similar statement according to QP-17.6, and forwards it to a training representative.

6.3 Maintenance of Orientation Records

A **training representative** performs the following:

6.3.1 Retains a copy of the completed attachment in files labeled "Privileged," "Privileged Records," or a similar statement in accordance with QP-17.6.

6.3.2 Submits a copy of the completed attachment form for each employee to a Records Processing Center in accordance with QP-17.6 by the end of the calendar year.

6.4 Environmental, Safety, and Health Orientation

To accomplish this orientation, the **supervisor** performs the following:

- 6.4.1 Informs the employee that for YMP work at Los Alamos National Laboratory (Los Alamos), the Los Alamos Environmental, Safety, and Health (ES&H) plan is to be followed. The Los Alamos YMP ES&H Plan also provides additional important information.
- 6.4.2 Informs the employee that additional YMP-specific ES&H training is required if unescorted field work is to be conducted at the Yucca Mountain site, either underground or on the surface. The Los Alamos YMP ES&H Plan provides additional important information.
- 6.4.3 Informs the employee that the Los Alamos YMP ES&H representative may be contacted for information concerning ES&H requirements at the YMP site. Training to YMP ES&H procedures for work at the YMP site may be coordinated through a training representative.

7.0 RECORDS

The following records result from this procedure.

Orientation

8.0 TRAINING REQUIREMENTS

- 8.1 Prior to conducting work described in Section 6.0, the supervisors, Training Coordinator, Training Specialist and Technical Assurance Liaison require training to this procedure. Training to this procedure is by "read only."
- 8.2 Employees receiving orientation do not have to be trained to this procedure because they have no specific responsibilities for actions in this procedure.

9.0 ATTACHMENTS

Attachment 1: Orientation (1 page)

Attachment 2: Overview of the Los Alamos YMP (4 pages)

ORIENTATION
SECTION I. EMPLOYEE INFORMATION
EMPLOYEE: Print name
YMP POSITION TITLE: Print
SECTION II. LOS ALAMOS YMP JOB ORIENTATION
Using Attachment 2 of this procedure as a guide, the above named employee has been provided with an orientation of their YMP position duties, responsibilities, and authority; and an overview of the Los Alamos YMP site characterization project and organizational structure.
SUPERVISOR: Print hame Date
SECTION III. LOS ALAMOS YMP QUALITY ASSURANCE ORIENTATION N/A
Using Attachment 2 of this procedure as a guide, the above named employee has been provided with an orientation of the Los Alamos YMP quality program, including QARD requirements and implementing documents applicable to the Los Alamos YMP.
TA LIAISON: Print name Signature Date
Los Alamos Yucca Mountain Site

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Characterization Project

Overview of the Los Alamos Yucca Mountain Project

An overview of the Los Alamos YMP is provided by the employee's supervisor using Section I of this attachment as a guide. An overview of the Los Alamos YMP quality assurance requirements is provided by a technical assurance liaison using Section II of this attachment as a guide.

Section I The Los Alamos Site Characterization Project

A. The Project

The project is the Department of Energy's (DOE) *Yucca Mountain Site Characterization Project*, which is also referred to as the *YMP* or *Yucca Mountain Project*. The purpose of this project is to study Yucca Mountain, located approximately 100 miles northwest of Las Vegas, Nevada, as a potential repository for high-level nuclear waste.

B. Project Organization

The project is managed by the DOE's Office of Civilian Radioactive Waste Management (OCRWM), the DOE/YMP Site Characterization Office, and the Management & Operations (M&O) contractor, TRW Environmental Safety Systems. Los Alamos is one of several participants involved in various aspects of the project.

The Los Alamos YMP is managed by a Laboratory Lead (LL), who reports to the M&O contractor. The LL is supported by several Project Leaders.

C. Technical Activities

Los Alamos scientists contribute to characterizing the Yucca Mountain site by determining the extent to which the natural barriers will prevent the release of radionuclides from the underground repository area. The research and development work at Los Alamos includes defining the groundwater chemistry and rock mineralogy and petrology along potential flow paths; determining site-specific radionuclides solubility and speciation, sorption and transport, and validating laboratory data by conducting field tests and analog studies, including conceptualization of transport in state-of-the-art computational codes.

Los Alamos scientists are responsible for the assessment of the probability of future volcanic and magmatic disruption of a repository and the effect of possible magmatic disruption. The characterization of volcanic features requires data on timing (age) and rates and volumes of magmatic activity to make the assessments.

Los Alamos is responsible for the coordination of participant's site characterization tests planned for the underground at Yucca Mountain in the Exploratory Studies Facility. The Los Alamos Test Coordination Office (EES-13/Las Vegas) facilitates design and construction interactions with the testing community.

D. Notebooks

Investigators use notebooks in the laboratory and in the field to document work performance. These are among the most important documents an investigator possesses. Notebooks receive technical reviews at least annually and quality assurance reviews before submittal to a Los Alamos Records Coordinator.

E. Publications and Data

Publications, including abstracts, must be formally approved by the LL, TRW, and the DOE/YMP Site Characterization Project Office before they can be released. Concurrent with approval, the LL may request that data in the report be entered into a DOE YMP database. Procedures govern the development of publications (technical information products) and submittal of data.

F. Samples

Samples are tracked from cradle to grave. A sample's location must always be known and traceability must be maintained. Many samples come from the Project Office drillholes and are the property of the YMP. These samples are accessible only through a Sample Overview Committee representative.

G. Training

Training to procedures that govern assigned tasks must be completed and documented prior to performing work.

H. Measuring and Test Equipment (M&TE) and Standards

M&TE and some standards must be calibrated as necessary and calibrations must be documented. Standards have to be traceable to their source.

I. Procurement

Purchases of standards and some services must follow quality assurance requirements. The procurement process is described in procedures.

In addition, property purchased with YMP funds is subject to special property management requirements. Questions concerning property purchased with YMP funds may be directed to the Los Alamos Property Management representative.

J. Software

Certain types of acquired or developed software used on the YMP (e.g., for modeling codes) must meet stringent standards for development and use. If you acquire, develop,

or use software, you must follow the requirements in the software procedures. Commercial or government off-the-shelf software packages (e.g., word processing, editing packages, spread sheets, or similar programs) are generally exempt from qualification under the software quality assurance program. For guidance on which software codes have been certified for use, how to certify a code, or general application of software quality requirements, contact the Software Management Coordinator.

K. Records

The YMP will go through a licensing process by the Nuclear Regulatory Commission. Adequate documentation of work to support the licensing process is very important. The records that document work are listed in various procedures that govern Los Alamos YMP activities. Questions regarding records may be directed to the Records Coordinator.

Remember, you are responsible for documenting your work!

L. Technical Assurance Liaisons

The Technical Assurance Liaisons (TAL) are individuals knowledgeable in the application of quality assurance program requirements and work very closely with Principal Investigators and other technical staff. TALs will be able to help you to understand and implement quality assurance requirements.

Section II Quality Assurance Requirements

A. Project Quality Assurance Requirements

Project quality assurance requirements are contained in an OCRWM document called the *Quality Assurance Requirements and Description (QARD)*. It provides mandatory requirements for the Los Alamos YMP Quality Program. These quality assurance requirements are implemented through procedures; including, Los Alamos Quality Administrative Procedures (QPs), Los Alamos Detailed Technical Procedures (DPs), DOE Project Office procedures, and M&O procedures. Los Alamos procedures are available through the Internet or hard copies may be obtained from a document control representative. Controlled copies of DOE and M&O procedures are available at the EES-13 office, Lotus Notes, or through a Project Office document control representative.

B. Use of Procedures

Work that is subject to the requirements of the Los Alamos quality assurance program must be performed according to controlled procedures. Employees are responsible for assuring that the correct procedure revision is used.

If a procedure cannot be implemented as written, YMP personnel should notify appropriate supervision. If it is determined that a portion of the work cannot be accomplished as described in a QP or DP, or would result in an undesirable situation, that portion of the work will be stopped and not resumed until the procedure is replaced by a new or revised document that reflects the current work practice. If a DP is not replaced by a new or revised document, the work will be described in accordance with QP-03.5, Documenting Scientific Investigation.

Employees may use copies of procedures printed from the controlled document electronic file; however, employees are responsible for verifying that the correct revision of this procedure is used.

When a procedure becomes obsolete or superseded, it must be destroyed or marked "superseded" to ensure it is not used to perform work.

C. Deficiencies/Nonconformances

A deficiency is a noncompliance with quality program requirements. Deficiencies are reported in various ways depending on their seriousness, e.g., performance report, deficiency report, and corrective action report. Corrective Action Reports are the most serious infractions that identify significant conditions adverse to quality and are reported directly to upper management. In general, efforts required to resolve a deficiency may include correcting the problem (remedial action), determining if similar problems exist (investigative action), and determining cause (root cause analysis) to prevent similar problems from occurring.

D. Stop Work Order

A stop work order is a formal order issued by the DOE to stop work on an activity. Stop work orders are issued for work conditions that, if uncorrected, could have a serious affect on safety or the ability to isolate waste. Any employee who recognizes a potential stop work condition should immediately stop the affected activity and notify a supervisor or the Office of Quality Assurance (OQA) representative.

E. Audits

Audits and surveillances are a way of verifying that we provide services that meet the YMP quality requirements and standards. An audit or surveillance is a review of work activities and documentation to determine the adequacy of our program and procedures and to evaluate the effectiveness of our implementation. Work subject to QARD requirements will eventually be reviewed (either by audits or surveillances) by OQA auditors. Work is also subject to self assessments by the Los Alamos TA staff.

F. Conflict Resolution

An employee who has a concern regarding a noncompliance with QARD requirements may request resolution. The issue is elevated to successive levels of management until resolved.

G. Quality Concerns

An employee who does not want to use internal channels to express a concern regarding the Civilian Radioactive Waste Management Program, may do so by utilizing the OCRWM Concerns Program. This is a program that provides a process for confidentially reporting concerns to OCRWM management.